

27

which is immobilized a first receptive material, the first receptive material being configured to preferentially bind to the test analyte; an indicator zone in which is immobilized a second receptive material, the second receptive material being configured to preferentially bind to uncomplexed conjugated detection probes; and a calibration zone in which is immobilized a third receptive material, the third receptive material being configured to preferentially bind to the calibration analyte. The lateral flow device may further comprising a conjugate pad in fluid communication with the porous membrane and a sample pad that is positioned upstream from the conjugate pad.

EXPERIMENTS

As depicted in FIG. 3, four individuals were videotaped for a 15 minute period without being informed as to what the purpose of such videotaping so as not to influence otherwise normal activities. The same individuals were later videotaped with a sensor hanging around their necks as a necklace for another 15 minute time period. Cart 1 displays the results that individuals generally resisted touching their faces when wearing the sensor about half as many times as they previously had when they did not wear the sensor.

While specific embodiments and applications of the present invention have been illustrated and described, it is to be understood that the invention is not limited to the precise configuration and components disclosed herein. Various modifications, changes, and variations which will be apparent to those skilled in the art may be made in the arrangement, operation, and details of the methods and systems of the present invention disclosed herein without departing from the spirit and scope of the invention. Those skilled in the art will appreciate that the conception upon which this disclosure is based, may readily be utilized as a basis for designing of other structures, methods and systems for carrying out the several purposes of the present invention to instruct and encourage the avoidance of hand to face contact, thus lessening the opportunity for bacterial or virus contact with tissues that could lead to disease. It is important, therefore, that the claims be regarded as including any such equivalent construction insofar as they do not depart from the spirit and scope of the present invention.

What is claimed is:

1. A method for preventing infection by a virus, comprising:

obtaining a sample from a person; assaying the sample to determine whether the person has been previously infected with a predetermined virus; if said assaying step indicates that such person has not been previously infected with said virus, providing to the person at least one sensor positioned to detect when a person's hand approaches a predetermined distance from the person's face; reducing the incidence of hand-to-face contacts by said person due to the person being warned by said at least one sensor of occasions when the person's hands approach said person's face, said at least one sensor incorporated into one of a writing instrument, a shirt collar, a button, a collar stay, and a closure mechanism for clothing; providing a signal generating device operatively associated with said at least one sensor and with a semiconductor device programmed to select one of a plurality of predetermined distances of proximity so that a person's hand triggers the signal generating device to warn the person that their hand is in the proximity of their mouth, said signal generating device employing at least a vibratory signal; and communicating from the

28

sensor to a recording device, via a transmitter, the occurrence of said vibratory signal, said recording device recording the occurrence of said vibratory signal to indicate the number of hand-to-face contacts by said person, thereby reducing the risk that infections by said virus will be acquired by said person.

2. The method of claim 1, wherein said at least one sensor has one of an IR emitter, an IR receiver, a signal generating device, and a semiconductor device programmed to select a predetermined distance of proximity.

3. The method of claim 1, wherein said step of assaying the sample comprises the steps of: screening the sample for the presence of antibodies specific to the virus in the sample; and determining the presence of antibodies specific to the virus in the sample.

4. The method of claim 1, wherein the adenovirus is selected from the group consisting of adenovirus type 5, adenovirus type 16, and adenovirus type 37.

5. The method of claim 1, wherein the virus is selected from the group consisting of adenovirus type 5 and adenovirus type 16.

6. The method of claim 1, wherein the step of assaying comprises determining the presence of antibodies specific to one or more peptides related to the virus.

7. The method of claim 1, wherein said assaying step is performed by using a method selected from the group consisting of serum neutralization assay and ELISA.

8. The method of claim 1, wherein the sample is selected from the group consisting of a biological sample, body fluid, a tissue sample, an organ sample, feces, blood, saliva, and any combination thereof.

9. The method as set forth in claim 1, wherein either immunoanalytical or nucleic-acid based techniques are employed to detect the presence of virus.

10. The method as set forth in claim 1, wherein said at least one sensor also produces a signal consisting of an electric shock.

11. The method as set forth in claim 1, wherein said at least one sensor also produces a signal selected from the group consisting of a sound, light and an electric shock.

12. The method as set forth in claim 1, wherein said at least one sensor also produces a signal selected from the group consisting of a sound and light.

13. The method as set forth in claim 1, further comprising transmitting data from said at least one sensor to a remote area and determining whether behaviors of individuals who had used said at least one sensor are modified due to using said at least one sensor for a predetermined time period.

14. The method as set forth in claim 1, wherein said at least one sensor is incorporated into a button.

15. The method as set forth in claim 1, wherein said recording device comprises a cell phone.

16. A kit for preventing infection by virus, comprising: a container for assaying an agent indicating the presence of antibodies to a predetermined virus; one of a shirt collar, a button and a collar stay having at least one sensor incorporated therein; a signal generating device that employs at least a vibratory signal operatively associated with said at least one sensor; a semiconductor device programmed to select one of a plurality of predetermined distances of proximity so that a person's hand triggers the signal generating device to warn a person that their hand is in the proximity of their mouth; and a transmitter for communicating from the sensor to a recording device the occurrence of said vibratory signal, said recording device recording the occurrence of said vibratory signal to indicate the number of hand-to-face contacts by said